Volume 71—Contents

NO. 1. JANUARY 1991

1 Histaminergic Transmission in the Mammalian Brain
Jean-Charles Schwartz, Jean-Michel Arrang, Monique Garbarg, Hélène Pollard, and Martial Ruat

53 Optical Approaches to Ontogeny of Electrical Activity and Related Functional Organization During Early Heart Development
Kohtaro Kamino

93 Fever: Role of Pyrogens and Cryogens
Matthew J. Kluger

129 Calcium Pump of the Plasma Membrane
Ernesto Carafoli

155 Mesocorticolimbic Dopaminergic Network: Functional and Regulatory Roles
Michel Le Moal and Hervé Simon

235 Chloride Transport by High-Resistance Heterocellular Epithelia
Erik Hviid Larsen

285 Motifs of Protein Phosphorylation and Mechanisms of Reversible Covalent Regulation
Donal A. Walsh, Philip Newsholme, Kendra C. Cawley, Scott M. Van Patten, and Karen L. Angelos

305 Cardiovascular Response to Stress
J. Alan Herd

NO. 2. APRIL 1991

331 Central Effects of Oxytocin
Philippe Richard, Françoise Moos, and Marie-José Freund-Mercier

371 Extracellular Ca^{2+} Sensing, Regulation of Parathyroid Cell Function, and Role of Ca^{2+} and Other Ions as Extracellular (First) Messengers
Edward M. Brown

413 Mechanical Properties of Isolated Cardiac Myocytes
Allan J. Brady

429 Intrinsic Regulation of Apical Sodium Entry in Epithelia
Klaus Turnheim

447 Functional Architecture of the Mammalian Retina
Heinz Wässle and Brian B. Boycott

481 Glycosaminoglycans: Molecular Properties, Protein Interactions, and Role in Physiological Processes
Richard L. Jackson, Steven J. Busch, and Alan D. Cardin

541 Molecular and Cellular Adaptation of Muscle in Response to Exercise: Perspectives of Various Models
Frank W. Booth and Donald B. Thomason

587 Mechanisms of Visual Plasticity: Hebb Synapses, NMDA Receptors, and Beyond
Josef P. Rauschecker

NO. 3. JULY 1991

617 Reflexes From the Heart
Roger Hainsworth

659 Functional Role of Renal Afferents
Andrea Stella and Alberto Zanchetti

683 Functional Studies of Cotransmission
Irving Kupfermann

733 Significance of Cation Transport in Control of Energy Metabolism and Thermogenesis
Torben Clausen, Cornelis van Hardeveld, and Maria Elisabeth Everts

775 Ion Channels in Leukocytes
Elaine K. Gallin

813 Calcium-Activated Neutral Protease (Calpain) System: Structure, Function, and Regulation
Dorothy E. Croall and George N. DeMartino

849 Voltage Sensor of Excitation-Contraction Coupling in Skeletal Muscle
Eduardo Ríos and Gonzalo Pizarro

909 Nuclear Pore Complex: Structure, Function, and Regulation
Mili Miller, Min Kyun Park, and John A. Hanover

NO. 4. OCTOBER 1991

951 Vitamin A Metabolism: New Perspectives on Absorption, Transport, and Storage
Rune Blomhoff, Michael H. Green, Joanne Balmer Green, Trond Berg, and Kaare R. Norum

991 Fetal Lung Liquid: Secretion and Reabsorption
L. B. Strang

1017 Neuropeptide Hormones as Neurotrophic Factors
Fleur L. Strand, Kenneth J. Rose, Lisa A. Zuccarelli, June Kume, Stephen E. Alves, Francis J. Antonawich, and Lara Y. Garrett

1047 Molecular Kinetics of Voltage-Dependent Na^+ Channels
Joseph Patlak

1081 Renal Medullary Organic Osmolytes
Arlyn Garcia-Perez and Maurice B. Burg

1117 Immunologic System in the Respiratory Tract
Herbert Y. Reynolds

1135 Physiological Adaptation to High Altitude: Oxygen Transport in Mammals and Birds
Carlos Monge and Fabiola León-Velarde

CORRIGENDA

Vann Bennett, "Spectrin-Based Membrane Skeleton: A Multipotential Adaptor Between Plasma Membrane and Cytoplasm," vol. 70, no. 4, October 1990, p. 1056: Ref. 36 should read BENNETT, H., AND J. CONDEELIS. Isolation of an immunoreactive analogue of brain fodrin that is associated with the cell cortex of *Dictyostelium amoebae*. *Cell Motil. Cytoskeleton* 11: 303–317, 1988.